REMARKS

In the foregoing amendments, claim 30 is amended. Claims 21-40 remain pending in the present application.

I. Response to 35 U.S.C. §112, Second Paragraph Rejection

Claim 30 was rejected in the Office Action under 35 U.S.C. §112, second paragraph as being indefinite. In response thereto, claim 30 is amended herein to clarify that the "specified level" refers to a power level.

Applicants wish to clarify that the foregoing amendments have been made for the purpose of better defining the invention in response to the rejections made under 35 U.S.C. §112. The amendment has been made as a matter of form to make the claims more readable. The amendment has not been made for reasons related to patentability. Applicants submit that no substantive limitations have been added to the claims based on prior art. Therefore, no prosecution history estoppel arises from these amendments. See *Black & Decker, Inc. v. Hoover Service Center* 886 F.2d 1285, 1294 n. 13 (Fed. Cir. 1989).

II. Response to 35 U.S.C. §103 Rejection

Claims 21-29, 31-34, and 36-40 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Zimmerman* (U.S. Patent No. 5,577,067) in view of *Dev et al.* (U.S. Patent No. 5,295,244). Also, claim 35 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Zimmerman* in view of *Dev et al.* and further in view of Applicant's admitted prior art. Applicants respectfully traverse these rejections, as discussed below.

A. Brief Summary of the Present Application

The present application is directed to monitoring systems and methods that implement display logic for displaying test results of a telecommunications system. The telecommunications system includes a plurality of channels, a plurality of nodes each of which connect to a number of channels, and one or more groups of nodes. Test results can be obtained on individual channels (channel level test results), on a node (node level test results), and on a group of nodes (group level test results) using a spectrum analyzer. In association with the spectrum analyzer (Figs. 1A-1C) is a

computer and related graphical user interface (GUI) software, which displays the test results in a user controlled format.

Figs. 11A-11K illustrate possible GUI displays for displaying the test results. Using the display level selection box 369, the user is able to select whether the GUI software displays the test results on the group level, node level, or channel level. Figs. 11A-11C illustrate possible displays when the *group* level button is selected. Figs. 11D-11F illustrate possible displays when the *node* level button is selected. And Figs. 11G-11K illustrate possible displays when the *channel* level button is selected.

B. Claims 21-27

Independent claim 21 is directed to a monitoring system for monitoring a communication system having at least a first group of nodes, each node of said first group having a plurality of channels. The monitoring system comprises a spectrum analyzer, a data analyzer, and a display device. The spectrum analyzer is configured to test the channels to obtain *channel parameters* and analyze the frequency spectrum of each node to obtain *node parameters*. The data analyzer is configured to receive the *channel parameters* and *node parameters* and to process them to obtain ***"a plurality of channel test results, a plurality of node test results, and a plurality of group test results."*** The display device is configured to display a test result selected from the group consisting of the *channel test results, node test results, and group test results*.

The prior art of record, taken alone or in combination, fails to teach or suggest a data analyzer that is configured to receive channel parameters and node parameters from a spectrum analyzer and process the channel parameters and node parameters to obtain channel test results, node test results, and group test results. Although *Zimmerman* appears to utilize a spectrum analyzer and/or other measuring devices, the amplitude vs. frequency data acquired by *Zimmerman* relates to the frequency response of amplifiers in the telecommunications equipment. This data is stored and then compared with actual data read from the amplifier (col. 2, lines 64-67). The difference (or delta) between the stored and actual data is used to tune or adjust the amplifier to null the delta (col. 5, lines 38-45) for alignment or realignment of the telecommunications equipment. *Zimmerman*, however, does not process channel parameters and node parameters to obtain channel test results, node test results, and

group test results. *Dev et al.* fails to overcome this deficiency of *Zimmerman* and is silent with respect to measuring and/or processing channel parameters and node parameters to obtain a plurality of channel test results, a plurality of node test results, and a plurality of group test results.

Furthermore, claim 21 includes the display device configured to display a test result selected from the group consisting of the channel test results, node test results, and group test results. As mentioned above, *Zimmerman* et al. does not obtain such test results, but appears to obtain only the frequency response of the amplifiers and the delta between the stored and actual responses. Although *Dev et al.* appears to allow the displaying of a network at different levels, it should be noted that these levels are location and topological levels, not test results selected from channel, node, and group test results as claimed.

For at least these reasons, Applicants assert that claim 21 is allowable over the combination of references as applied in the Office Action and respectfully request that the Examiner kindly withdraw the rejection. Dependent claims 22-27 are believed to be allowable for at least the reason that these claims depend from allowable independent claim 21.

C. Claims 28-37

Independent claim 28 is directed to a method for monitoring a communication system having at least one group of nodes, each node having a plurality of channels. The method comprises the steps of acquiring data to obtain channel parameters and node parameters, analyzing the acquired data to obtain channel test results, node test results, and group test results, and controlling a display screen. The display screen is controlled to display test results at the different levels of the communication system.

The prior art of record, taken alone or in combination, fails to teach or suggest acquiring data to obtain channel parameters and node parameters from a channel test and spectrum scan test and analyzing the acquired data to obtain channel test results, node test results, and group test results. Although *Zimmerman* appears to utilize a spectrum analyzer and/or other measuring devices, the data acquired by *Zimmerman* relates to a frequency response of amplifiers in the telecommunications equipment. However, *Zimmerman* does not process channel parameters and node parameters to obtain channel test results, node test results, and group test results. *Dev et al.* fails to

overcome this deficiency of *Zimmerman* and is silent with respect to measuring and/or processing channel parameters and node parameters to obtain a plurality of channel test results, a plurality of node test results, and a plurality of group test results.

Furthermore, claim 28 includes controlling the display screen on a display device to display a test result selected from the group consisting of the channel test results, node test results, and group test results. As mentioned above, *Zimmerman* et al. does not obtain such test results, but appears to obtain only the frequency response of the amplifiers and the delta between the stored and actual responses. Although *Dev et al.* appears to allow the displaying of a network at different levels, it should be noted that these levels are location and topological levels, not test results selected from channel test results, node test results, and group test results, as claimed.

For at least these reasons, Applicants assert that claim 28 is allowable over the combination of references and respectfully request that the Examiner withdraw the rejection. Furthermore, dependent claims 29-37 are believed to be allowable for at least the reason that these claims depend from allowable independent claim 28.

D. Claims 38-40

Independent claim 38 is directed to control process software for controlling a display screen of a display device. The control process software comprises logic configured to acquire data during a channel test and spectrum scan test of a communication system in order to obtain channel parameters and node parameters. The control process software further comprises logic configured to analyze the acquired data to obtain channel test results, node test results, and group test results, and logic configured to organize these test results for display test results selected from the group consisting of the channel test results, node test results, and group test results.

The prior art of record, taken alone or in combination, fails to teach or suggest logic configured to acquire channel parameters and node parameters and logic configured to analyze the acquired data to obtain channel test results, node test results, and group test results. Although *Zimmerman* appears to utilize a spectrum analyzer and/or other measuring devices, the amplitude vs. frequency data acquired by *Zimmerman* relates to the frequency response of amplifiers in the telecommunications equipment. This data is stored and then compared with actual data read from the

amplifier (col. 2, lines 64-67). The difference (or delta) between the stored and actual data is used to tune or adjust the amplifier to null the delta (col. 5, lines 38-45) for alignment or realignment of the telecommunications equipment. *Zimmerman*, however, does not process channel parameters and node parameters to obtain channel test results, node test results, and group test results. *Dev et al.* fails to overcome this deficiency of *Zimmerman* and is silent with respect to measuring and/or processing channel parameters and node parameters to obtain a plurality of channel test results, a plurality of node test results, and a plurality of group test results.

Furthermore, claim 38 includes logic configured to organize the channel test results, node test results, and group test results to display a test result selected from the group consisting of the channel test results, node test results, and group test results. As mentioned above, *Zimmerman* et al. does not obtain such test results, but appears to obtain only the frequency response of the amplifiers and the delta between the stored and actual responses. Although *Dev et al.* appears to allow the displaying of a network at different levels, it should be noted that these levels are location and topological levels, not test results selected from channel, node, and group test results, as claimed.

For at least these reasons, Applicants assert that claim 38 is allowable over the combination of references and respectfully request that the Examiner withdraw the rejection. Furthermore, dependent claims 39 and 40 are believed to be allowable for at least the reason that these claims depend from allowable independent claim 38.

E. Summary

To establish prima facie obviousness of a claimed invention, all the claim limitation must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In this case, the combination of *Zimmerman* and *Dev et al.* do not teach or suggestion each and every feature of the independent claims, as discussed above.

"The PTO has the burden under §103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would

lead that individual to combine the relevant teachings of the references." *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

"Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so." *ACS Hospital Systems, Inc., v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). In this case, *Zimmerman* and *Dev et al.* do not provide any teaching or suggestion that would warrant combining the references as the Examiner suggests.

A §103 rejection presumes the existence of differences between the subject matter claimed and the teachings of the prior art. Otherwise a rejection under §102 would have sufficed. Thus, the Examiner must be able to point to something in the prior art that suggests in some way a modification of a particular reference or a combination with another reference in order to arrive at the claimed invention.

The Examiner's examination of the present application should not be predicated upon the obviousness of particular features, but rather should be based upon an evaluation of the invention as a whole. When viewed as a whole, *Zimmerman* discloses that allows an amplifier to be realigned or re-tuned to a predetermined response. Also, a replacement amplifier can also be aligned or tuned to the desired response. A display of the delta is used to adjust the response to within acceptable limits (see *Zimmerman* Fig. 4C). With respect to *Dev et al.*, this reference when taken as a whole teaches a display strategy for showing an entire network. Although this reference appears to provide information regarding different aspects of the network, it is clear that this reference fails to test the network at the channel, node, and group level, and fails to display test results selected from channel test results, node test results, and group test results.

CONCLUSION

Applicants respectfully submit that all rejections have been traversed and/or accommodated and that pending claims 21-40 are in condition for allowance. Favorable reconsideration and allowance of the present application and pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,

Glenn W. Brown

Glenn W. Brown
Reg. No. 51,310

THOMAS, KAYDEN,
HORSTEMEYER & RISLEY, L.L.P.
Suite 1750
100 Galleria Parkway N.W.
Atlanta, Georgia 30339
(770) 933-9500

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date mentioned below.

09-14-2005 Mary N. Kilgore
Date Signature – Mary N. Kilgore